

TRI-METAL AND DUAL-METAL STACKED INDUCTORS

Abstract

A high performance inductor which has a relatively low sheet resistance that can be integrated within a semiconductor interconnect structure and can be used in RF applications, including RF CMOS and SiGe technologies, is provided. The inductor is either a dual-metal inductor including a first layer of metal which serves as an upper metal wire in the semiconductor structure and a second layer of metal located directly on top of the first layer of metal, or a tri metal inductor, which includes a third layer of metal located directly on top of the second layer of metal. No vias are located between the various metal layers of the inventive inductor.